

Rock Island Arsenal
Incinerator Building
(Building 133)
Gillespie Avenue between South Avenue
and Ramsay Street
Rock Island
Rock Island County
Illinois

HAER No. IL-20-Y

HAER
ILL.
81-ROCIL,
3/133-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
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HISTORIC AMERICAN ENGINEERING RECORD

HAER
ILL,
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3/133-

ROCK ISLAND ARSENAL
INCINERATOR BUILDING
(Building 133)
HAER No. IL-20Y

Location: Gillespie Avenue Between South Avenue and Ramsey Street,
Rock Island Arsenal,
Rock Island,
Rock Island County, Illinois
UTM: 15.704730.4598610
Quad: Davenport East

Date of Construction: 1917-1918

Present Owner and Occupant: U.S. Army

Present Use: Maintenance office and garage

Significance: Situated in a manufacturing area southwest of the Greek Revival stone shops on Rodman Avenue, the Incinerator Building was constructed in 1917-1918 as part of an artillery shell production complex. The building's Gothic Revival design mirrored the architectural detailing of the nearby Artillery Ammunition Assembling Plant (see HAER No. IL-20U). Part of the Rock Island Arsenal National Historic District, the Incinerator Building embodied an equal concern for utilitarian and aesthetic considerations that became increasingly rare during subsequent wartime construction programs.

Historian: Jeffrey A. Hess, February 1985

Architectural Historian: David Arbogast, February 1985

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PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: The building site was selected in February 1917 (Burr to Chief of Ordnance, February 2, 1917; Babbitt to Burr, February 12, 1917). Construction activity commenced in April 1917, and the building was completed in 1918 (War's Greatest Workshop, p. 26).
2. Architect: Westinghouse-Church-Kerr Company of New York (Burr to Chief of Ordnance, April 18, 1917)
3. Original and subsequent owners: U.S. Army.
4. Builder, contractor, supplier: Westinghouse-Church-Kerr Company of New York served as general contractor on a cost plus 10 per cent basis (Completion Report, p. 2).
5. Original plans and construction: On April 18, 1917, Westinghouse-Church-Kerr submitted to the arsenal command a crenelated, Gothic Revival design (see HAER Photo No. IL-20U-12) for an Artillery Ammunition Assembling Plant, which was to be largest structure in a proposed shell production complex. The design was approved by the War Department on April 20, 1917, and it strongly influenced the architectural detailing of several neighboring structures, including the Incinerator Building (Crozier to Burr, April 20, 1917).

Original drawings for the Incinerator Building, dated 1917-1918, are on file at the Rock Island Arsenal Engineering Plans and Services Division. They show a stuccoed masonry building with a one-bay, two-story tower flanked on the north by a one-bay, one-story wing and on the south by a two-bay, one-story wing. An octagonal smokestack, approximately 60 feet in height, adjoins the south facade of the south wing. The roof lines of the tower and wings are accented with crenulations. The building was apparently constructed as planned. A 1941 photograph in the picture collection of the Rock Island Arsenal Historical Office documents the original construction of the tower and wings (see HAER Photo No. IL-20Y-4). This photograph, however, does not show the smokestack, the site of which is occupied by a steel-framed garage addition. The construction and demolition of the tower is documented by an undated pencil notation on the following original drawing in the Rock Island Arsenal Engineering Plans and Services Division: Westinghouse-Church-Kerr,

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"Artillery Ammunition Assembling Plt. / Incinerator Building / Plans, Elevations & Section," January 7, 1918, No. 2183-E-519, RIA B1330A2, D40088A. The pencil notation consists of an arrow pointing to the smokestack along with the word, "Removed."

6. Alterations and additions: Before 1941, the smokestack was demolished and a one-story, steel-framed garage addition was erected on the building's south elevation (see HAER No. IL-20Y).

After 1941, the roofline crenulations were replaced by a straight-line parapet surmounted by a metal coping.

About 1952, the original steel sash was infilled with glass block. The following plan for this alteration is on file at the Rock Island Arsenal Engineering Plans and Services Division: "Bldg No. 133 Sash Replacement," December 1, 1951, PRL-352-DM, RIA B133-A3.

B. Historical Context:

On February 2, 1917, the commandant of Rock Island Arsenal, Colonel George W. Burr, informed the War Department in Washington that he had selected a tentative location, about two blocks southwest of the Greek Revival stone shops on Rodman Avenue, for a proposed artillery ammunition assembling complex, which included a large Assembling Plant (see IL-20U), a small TNT Building (see HAER No. IL-20V), and a smaller Incinerator Building. Burr explained that the site "will place the main buildings as conveniently as possible for general purposes and at the same time will isolate as much as possible the smaller buildings which are to contain explosives or are to be devoted to the more hazardous operations" (Burr to Chief of Ordnance, February 2, 1917). On February 12, 1917, the War Department wrote Burr that "the general scheme as outlined in preceding letter. . . is approved" (Babbitt to Burr, February 12, 1917).

In selecting an architectural design for the main building in the complex -- the Artillery Ammunition Assembling Plant -- Burr at first considered a Greek Revival motif that would complement the major manufacturing shops on Rodman Avenue. But as he informed the War Department on April 18, 1917:

"The architects tell me that it is extremely difficult to follow the existing building types of the Arsenal in modern buildings in which three-quarters of the wall surface is given over to window space. This construction is necessary in [the Artillery Ammunition Assembling Plant] because of the lighting requirements

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and it is also most desirable in a plant handling explosives in order that the force of a minor explosion may blow out the windows without damage to the walls of the structure" (Burr to Chief of Ordnance, April 18, 1917).

To satisfy both safety and aesthetic considerations, Burr selected a Gothic Revival style for the Artillery Ammunition Assembling Plant that incorporated large blocks of industrial steel sash in the facades while embellishing the roofline with crenelated detailing (see HAER Photo No. IL-20U-12). Prepared by Westinghouse-Church-Kerr Company of New York, the design was approved by the War Department on April 20, 1917 (Crozier to Burr, April 20, 1917). To maintain architectural consistency, the TNT Building and the Incinerator Building were designed in the same Gothic Revival idiom.

With Westinghouse-Church-Kerr serving as general contractor, the Incinerator Building was constructed in 1917-1918. Its purpose was to dispose of chemical wastes produced by the artillery shell loading complex. After the arsenal terminated artillery shell production at the end of 1919, the building was converted into a maintenance office. Before 1941, the original incinerators and smokestack were removed, and a garage addition was constructed on the south elevation. The building still serves as a maintenance office and garage. It has been designated as "Building 133" at least since 1941 (see HAER Photo No. IL-20Y-4; for additional documentation, see HAER No. IL-20).

Prepared by: Jeffrey A. Hess
 MacDonald and Mack Partnership
 February 1985

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The building exhibits a crenellated form of the late Gothic Revival style related to the popular Collegiate Gothic of the period, which was normally used for all types of educational buildings. Its application here, and in Buildings 250, 251, 139, and 140, is one indication of the versatility of the style.
2. Condition of fabric: The building is not well-maintained and is showing its age, with peeling paint and some loss of exterior stucco.

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B. Description of Exterior:

1. Overall dimensions: Measuring 54' (4 bays) x 25' (2 bays), the building is one story tall with a second story above the pair of bays second from the north end. A full attic runs above the first story and below the second.
2. Foundations: Poured, reinforced concrete.
3. Walls: Stuccoed brick (HAER Photo Nos. IL-20Y-1 and IL-20Y-2). Concrete buttresses rising from the ground to the parapet wall divide the elevations into a regular bay system. Each bay is connected between the buttresses and below the parapet wall by a very shallow segmental arch. The parapet wall has a projecting concrete coping which is indented at regular intervals to give the building a crenellated appearance. The east and west bays of the second story have a raised parapet wall segment with a set of three indented machicolations. The exterior is painted white.
4. Structural systems: Load-bearing brick walls with two steel pipe columns (HAER Photo No. IL-20Y-3). The first- and second-story floor systems are reinforced concrete and the attic floor system is built-up wood beams and joists. The roof systems are reinforced concrete.
5. Openings:
 - a. Doorways: In the second bay from the north end of the west elevation is the principal doorway (HAER Photo No. IL-20Y-1). Its masonry opening contains a modern slab door with upper glass panel.
 - b. Windows: Typical bays (HAER Photo Nos. IL-20Y-1 and IL-20Y-2) contain single window openings which have had their original industrial steel sash removed and replaced with glass block with small, raw aluminum two-light hopper sash centered in their lower ends.
6. Roof:
 - a. Shape, covering: The roofs are flat and are covered with tar and gravel.
 - b. Cornice, eaves: The roofs are surrounded by a parapet wall (HAER Photo Nos. IL-20Y-1 and IL-20Y-2) and have an internal water drainage system tied to an underground drainage system.
7. Ancillary structures: At 60' x 40', the south addition (HAER Photo Nos. IL-20Y-1 and IL-20Y-2) covers more land than the main build-

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ding. Its one-story, rectangular mass is aligned with the west elevation of the main building, with which it also shares the main building's lower south wall. It extends east and south beyond the main building. The roof and walls are clad with corrugated steel siding and roofing. In the west elevation is a set of three large doorways containing overhead doors. There are no windows.

C. Description of Interior:

1. Floor plans: Primarily because of its relatively small size the building has simple floor plans. At the north end of the first story is a locker, shower, and restroom. To its south on the east side is a pair of offices. The remainder of the space is primarily used as an open lunch room. The attic and second story are open storage rooms.
2. Stairways: Two stairways serve the building. Centered along the the west wall of the first story is a stair (HAER Photo No. IL-20Y-3) to the attic level. Centered beneath the second story is a stair from the attic level up to that story. Both stairs have straight runs and are built with plain, painted, wood, rectilinear components.
3. Flooring: First-story flooring (HAER Photo No. IL-20Y-3) is poured concrete covered linoleum tile. Attic and second-story flooring is wood covered with sheet linoleum.
4. Wall and ceiling finishes: Exterior first-story walls (HAER Photo No. IL-20Y-3) are painted brick. Interior partition walls (HAER Photo No. IL-20Y-3) are painted gypsum board. The ceiling (HAER Photo No. IL-20Y-3) is painted acoustical tile.

Exterior attic walls are painted brick. Partition walls are wire cage. The ceiling is painted concrete.

The second-floor walls are unpainted brick and the ceiling is unpainted concrete.

5. Openings:

- a. Doorways and doors: In the west bay of the south elevation, now opening into the addition, is a large, former exterior, doorway (HAER Photo No. IL-20Y-3) containing a pair of steel sliding doors with each leaf having nine lights over a single panel. The only original surviving interior doorway is at the head of the stair at the second floor where it covers the floor opening for the stair. Its plain, wood frame contains a large pair of beaded, tongue-and-groove, board doors with Z-bracing. All other interior doorways are non-original and

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contain appropriate doors for their partitions.

- b. Windows: The masonry window openings (HAER Photo No. IL-20Y-3) have no casings or other trim.
- 6. Hardware: No original hardware is known to survive.
- 7. Mechanical equipment:
 - a. Heating, air conditioning, ventilation: The building is heated by steam radiators (HAER Photo No. IL-20Y-3) supplied by a central heating plant (Building 227). There is no mechanical air conditioning or ventilation system.
 - b. Lighting: Lighting is by means of electrical fluorescent fixtures (HAER Photo No. IL-20Y-3) with no evidence remaining of the original artificial lighting system, assumed to be incandescent.
 - c. Plumbing: No original plumbing fixtures survive.

D. Site:

General setting and orientation: The building faces Gillespie Avenue to the west and faces the imposing mass of Building 250, a heavy gun plant, to which it is stylistically related, across the Avenue. To the south is Building 168, a central heating plant, which is served by a railroad spur running east and north of Building 133. The site slopes gently to the south.

Prepared by: David Abrogast
Architectural Conservator
February 1985

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings:

The following drawings are on file at the Rock Island Arsenal Engineering Plans and Services Division:

Westinghouse-Church-Kerr Company, "Artillery Ammunition Assembling Plt. / Incinerator Building / Plans Elevations & Section," January 7, 1918, No. 2183-E-519, RIA B133-A2, Dr40088A. Shows original construction; also contains undated pencil notation that original smokestack was "removed."

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Westinghouse-Church-Kerr Company, "Art. Amm. Assm. Plant / Incinerator B'LD'G / Plans & Sections," January 26, 1918, No. 2183-E-592, RIA E133-1, D40105. Shows original construction.

Westinghouse-Church-Kerr Company, "Incinerator Building / Reinforced Concrete Details / Foundation & Floor Plan," February 27, 1917, No. 2183-E-497, RIA B132-A1, D40088." Shows original construction.

"Building No. 133 Sash Replacement," December 1, 1951, PRL-352-DM, RIA B133-A3. Shows replacement of original steel sash with glass block.

B. Early Views:

The picture collection of the Rock Island Arsenal Historical Office has a 1941 photograph documenting the original Gothic Revival detailing of the tower and wing sections; the view also shows the construction of a one-story garage addition on the site of the smokestack. It is captioned, "23-4408 April 7, 1941 / Building No. 133 'AY' Tool House, looking south-east" (see HAER No. IL-20Y-4).

C. Bibliography:

1. Primary and unpublished sources:

Babbitt, E. B. to George W. Burr, February 12, 1917. Rock Island Arsenal Historical Office. Letter approving selection of building site.

Burr, George W. to Chief of Ordnance, February 2, 1917. Rock Island Arsenal Historical Office. Letter explaining selection of site and requesting approval of same.

Burr, George W. to Chief of Ordnance, April 18, 1917. Rock Island Arsenal Historical Office. Letter explaining selection of Gothic Revival architectural style for the Artillery Ammunition Assembling Plant and requesting approval of same.

Crozier to George W. Burr, April 20, 1917. Rock Island Arsenal Historical Office. Letter approving Gothic Revival design for the Artillery Ammunition Assembling Plant.

Hess, Jeffrey A., and Mack, Robert C. "Historic Properties Report Rock Island Arsenal, Rock Island, Illinois". Prepared by MacDonald and Mack Partnership, and Building Technology Incorporated for the Historic American Buildings Survey/Historic American Engineering Record, National Park Service, U.S. Department of the Interior, 1985. The report, with accompanying

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inventory cards, is filed as field records in the Prints and Photographs Division, Library of Congress, under HAER No. IL-20.

Real Property Cards. Rock Island Arsenal Engineering Plans and Services Division. Briefly describes building's structural characteristics and maintenance history.

2. Secondary and published sources:

Completion Report Covering All Construction Projects Accomplished Under Supervision of the Construction Division, U.S. Army at Rock Island Arsenal. N. pl.: n. pub., 1922. Rock Island Arsenal Historical Office. Describes planning and construction of building; contains "progress map" documenting construction of the overhead passageways.

Nothstein, Ira O. and Stephens, Clifford W. A History of Rock Island and Rock Island Arsenal from Earliest Times to 1954. Rock Island Arsenal, 1965. 3 vols. Discusses artillery shell production during World War I.

War's Greatest Workshop Rock Island Arsenal. N. pl.: Arsenal Publishing Co. of the Tri-Cities, 1922. Rock Island Arsenal Historical Office. Describes planning and construction of the building.

PART IV. PROJECT INFORMATION

This project was part of a program initiated through a memorandum of agreement between the National Park Service and the U.S. Department of the Army. Stanley J. Fried, Chief, Real Estate Branch of Headquarters DARCOM, and Dr. Robert J. Kapsch, Chief of the Historic American Buildings Survey/Historic American Engineering Record, were program directors. Sally Kress Tompkins of HABS/HAER was program manager, and Robie S. Lange of HABS/HAER was project manager. Building Technology Incorporated, Silver Spring, Maryland, under the direction of William A. Brenner, acted as primary contractor, and MacDonald and Mack Partnership, Minneapolis, was a major subcontractor. The project included a survey of historic properties at Rock Island Arsenal, as well as preparation of an historic properties report and HABS/HAER documentation for 38 buildings. The survey, report, and documentation were completed by Jeffrey A. Hess, historian, Minneapolis; Barbara E. Hightower, historian, Minneapolis; David Arbogast, architectural historian, Iowa City, Iowa; and Robert C. Mack, architect, Minneapolis. The photographs were taken by Robert A. Ryan, J Ceronie, and Bruce A. Harms of Dennett, Muessig, Ryan, and Associates, Ltd., Iowa City, Iowa. Drawings were produced by John Palmer Low, Minneapolis.